UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,793	09/19/2005	Mehdi-Laurent Akkar	76.0828 US/PR	7755

41754   7590   09/29/2008

THE JANSSON FIRM
9501 N. CAPITAL OF TX HWY #202
AUSTIN, TX 78759

EXAMINER
MCCARTHY, CHRISTOPHER S

ART UNIT	PAPER NUMBER
2113	

MAIL DATE	DELIVERY MODE
09/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _19 September 2005_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-10_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-10_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _19 September 2008_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.   The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

3.   Claim 3 recites the limitation "the control flow graph" in claim. There is insufficient antecedent basis for this limitation in the claim.

4.   Claim 3 recites the limitation "the program" in claim. There is insufficient antecedent basis for this limitation in the claim.

5.   Claim 6 recites the limitation "the program" in claim. There is insufficient antecedent basis for this limitation in the claim.

6.   Claim 6 recites the limitation "the shared memory" in claim. There is insufficient antecedent basis for this limitation in the claim.

7.   Claim 7 recites the limitation "the stack" in claim. There is insufficient antecedent basis for this limitation in the claim.

8.   Claim 7 recites the limitation "the shared memory" in claim. There is insufficient antecedent basis for this limitation in the claim.

9.   Claim 8 recites the limitation "the shared memory" in claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Objections

10.   Claims 6-8, 10 are objected to under 37 CFR 1.75(c) as being in improper form because a

multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 101

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-

statutory subject matter. There is no computer readable medium on which the code is stored.

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12.   Claims 1-6, 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Bres et al.

European Patent EP0606802.

        As per claim 1, Bres teaches a method to secure the execution of at least one module in

an electronic unit comprising information processing means and information storage means,

characterised in that, during the execution of said module, it consists, during the passage by at

least one beacon, in storing one or more items of information concerning one or more

characteristics of said beacon and in checking, at at least one check point, the consistency of the information stored about all beacons encountered (page 5, lines 32-34; page 6, lines 12-17).

As per claim 2, Bres teaches a method to secure at least one module designed to be integrated in an electronic unit including information processing means and information storage means, characterised in that it integrates automatically in said module equipped with a set of directives a set of static data, beacon functions and verification functions, the first representing a set of valid executions, the second calculating dynamically a representation of the execution, and the last used to check the consistency of the static and dynamic data (page 6, lines 12-17; page 7, lines 5-14).

As per claim 3, Bres teaches a method according to claim 2, characterised in that it uses the control flow graph of the program to be protected to generate the static information used by the verification functions (page 5, lines 3-5; page 4, lines 35-38).

As per claim 4, Bres teaches a method according to claim 2 or 3, characterised in that a beacon is information which defines the characteristics of the corresponding passage point and/or one or more other passage points (page 6, lines 12-17, 1-5).

As per claim 5, Bres teaches a method according to claim 4, characterised in that a beacon is one of the following elements, a combination of several of them, or all of them: an integer locating the beacon in the code to be protected; a Boolean variable defining whether it is the first or the last beacon; a data structure characterising, according to the value of a register or a given variable, all beacons through which passage will be forbidden (using a verification function) in the remaining execution; a data structure characterising, according to the value of a register or a given variable, all beacons through which passage will be forced (using a

verification function) in the remaining execution (page 6, lines 12-17; page 11, line 36 – page 12, line 1).

As per claim 6, Bres teaches a method according to one of claims 2 to 5, characterised in that a beacon function is one which is called by the program at each passage by a beacon and which will consist in storing dynamically in the shared memory various items of information concerning the beacon (page 6, lines 12-17; page 7, lines 5-14).

As per claim 8, Bres teaches a method according to one of claims 2 [to 7], characterised in that a history verification function is one called at each check point to check the consistency of the information stored in the shared memory during the successive calls of the beacon functions (page 6, lines 12-17).

As per claim 9, Bres teaches an electronic unit including information processing means and information storage means containing at least one module to be executed characterised in that it includes the means required, during the execution of said module, and during the passage by at least one beacon, to store one or more items of information concerning one or more characteristics of said beacon in said storage means and means to check, at at least one check point, the consistency of the information stored about all beacons encountered (page 6, lines 12-17).

As per claim 10, Bres teaches a program including program code instructions to execute the steps of the method according to one of claims 1 to 6 when said program is run in an electronic unit (see claim 1).

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

14.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bres in view of

Microsoft Computer Dictionary (MCD).

        As per claim 7, Bres teaches a method according to claim 6. Bres does not explicitly

teach it characterised in that a beacon function is one which pushes the beacon onto the stack in

the shared memory and/or one which updates a checksum contained in the shared memory with

the beacon data. MCD does teach a checksum (page 84). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to use the checksum of MCD in the

process of Bres. One of ordinary skill in the art would have been motivated to use the checksum

of MCD in the process of Bres because MCD teaches the checksum to be a process by which to

compare data to check if not matching and therefore an error; an explicit desire of Bres (page 6,

lines 12-17).

Conclusion

15.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure: See attached PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER S. MCCARTHY whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher S. McCarthy/
Primary Examiner, Art Unit 2113